

100

FIG. 100

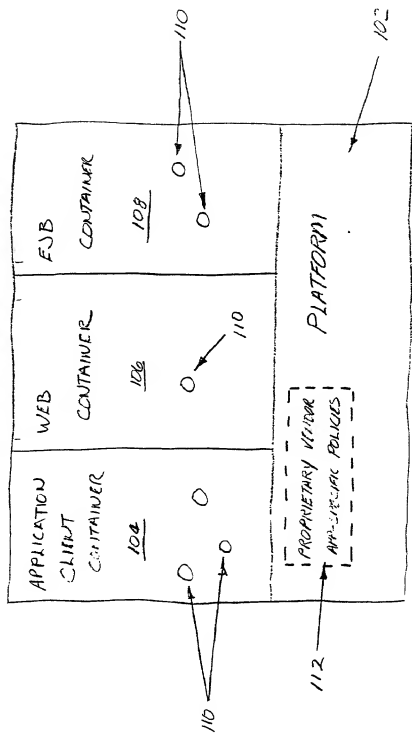


FIG. 1
(PRIOR ART)

200

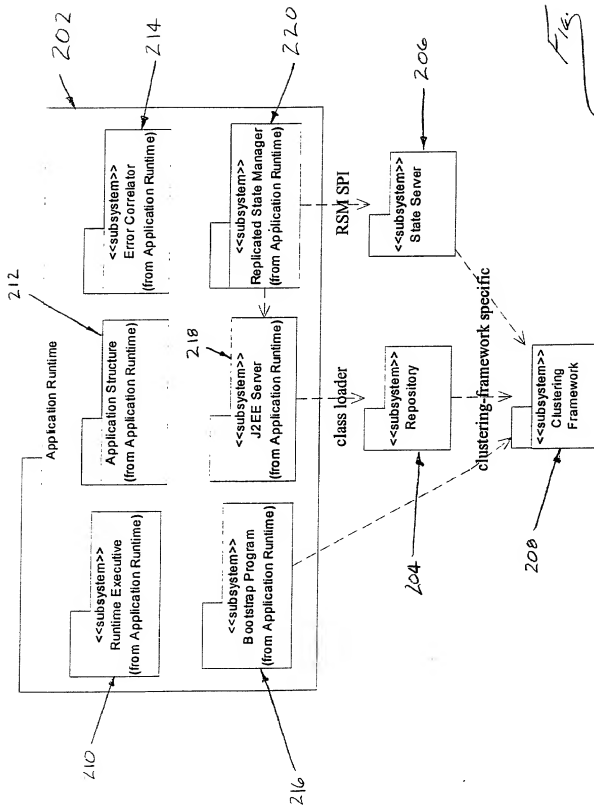
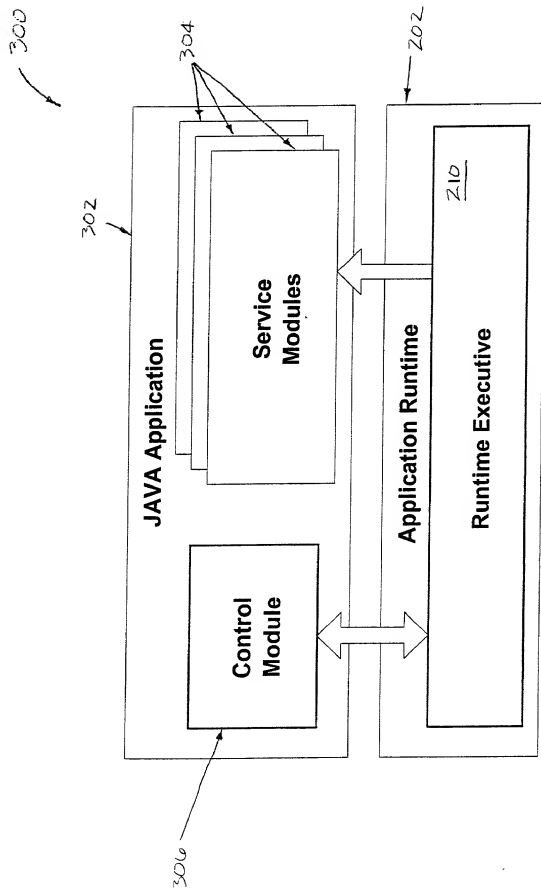


FIG. 2



350

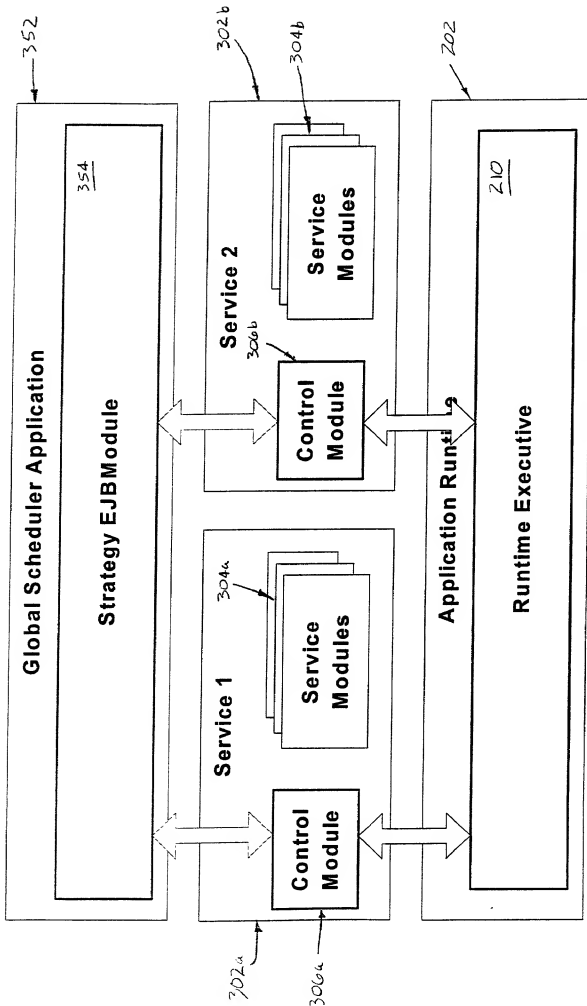


FIG. 3B

302

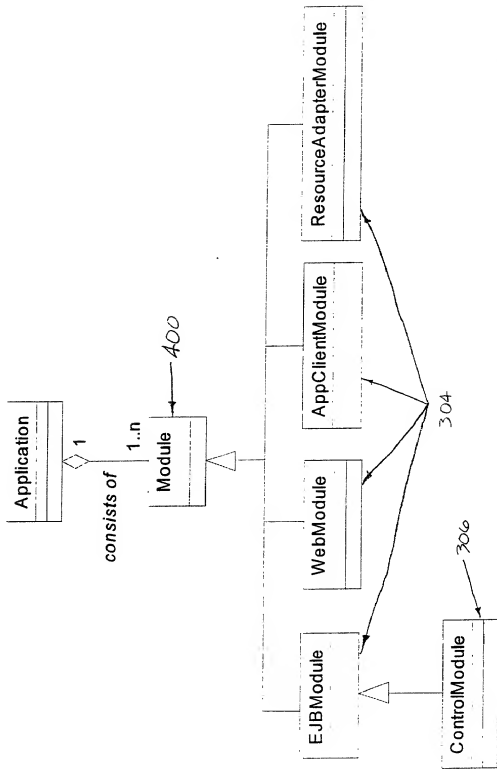


FIG. 4

500

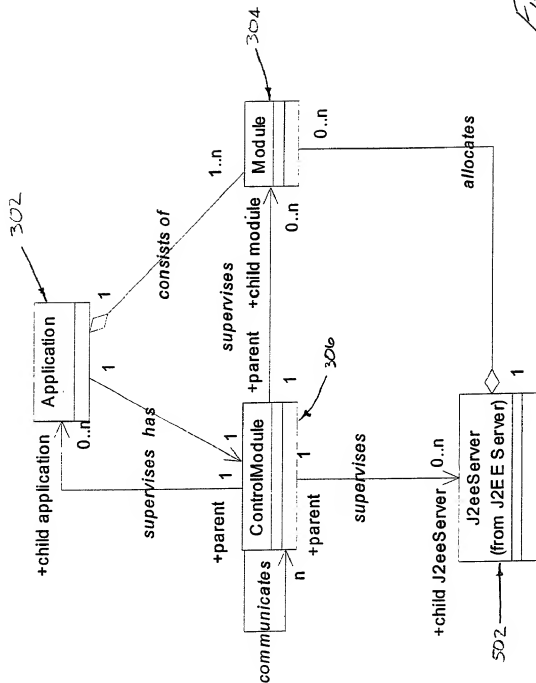
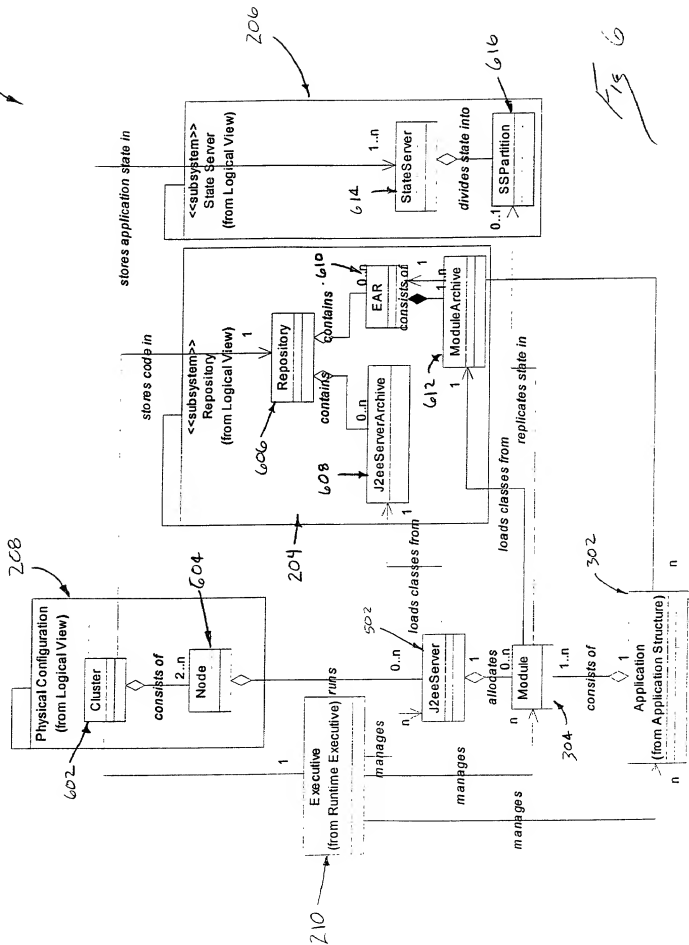


Fig. 5

600



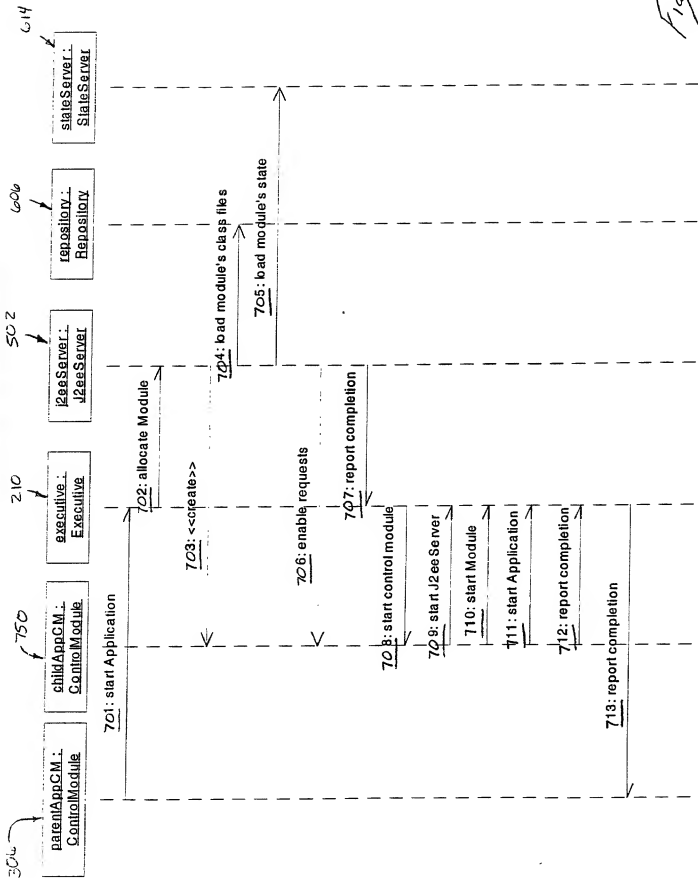
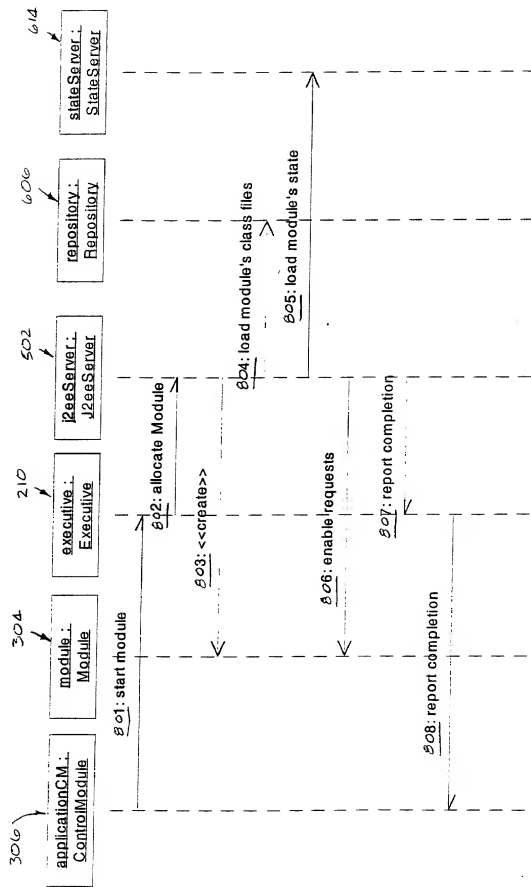
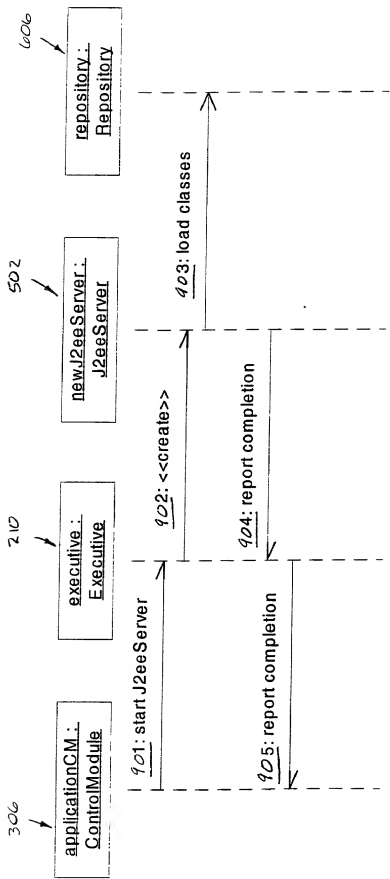


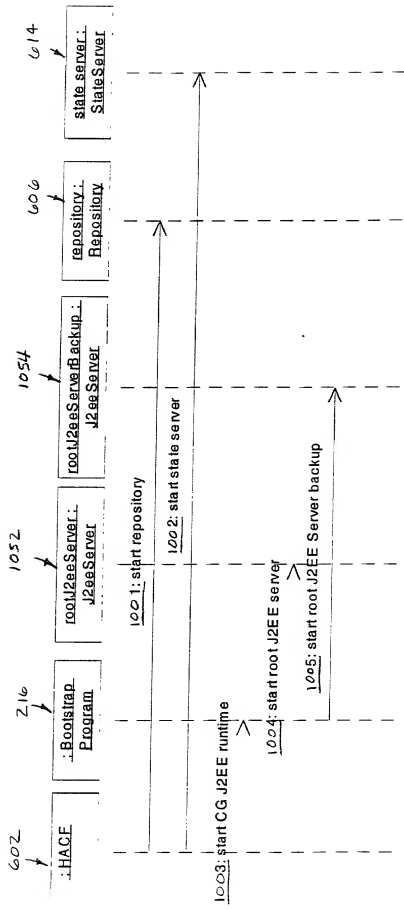
Fig. 7

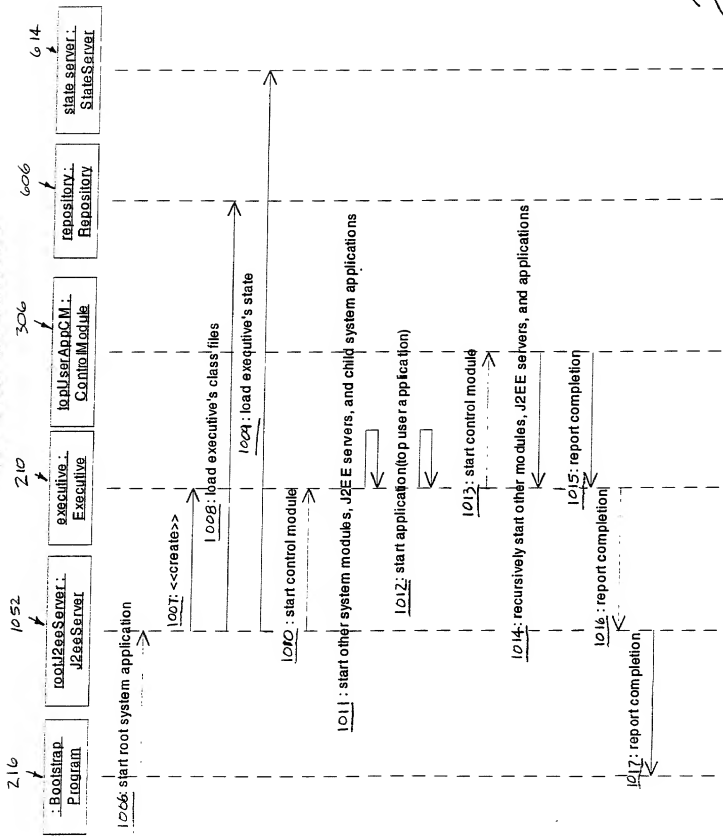


100

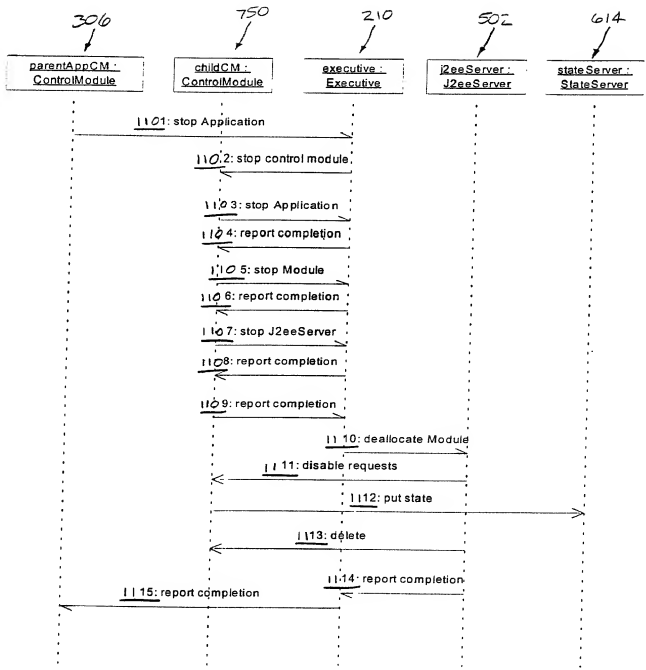


15





1100



F₁₀ 11

FIG. 12

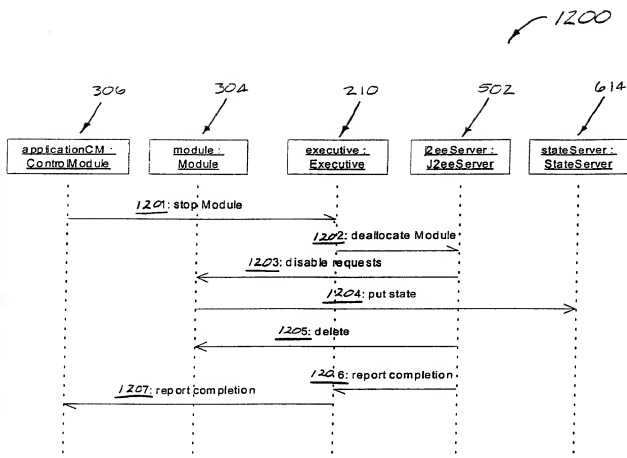


Fig. 12

1300

502

210

306

J2eeServer.
J2eeServer

executive.
Executive

ApplicationCM.
ControlModule

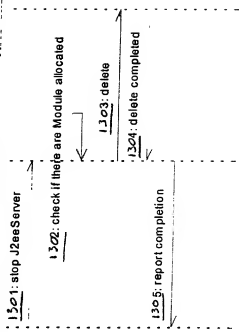


Fig. 13

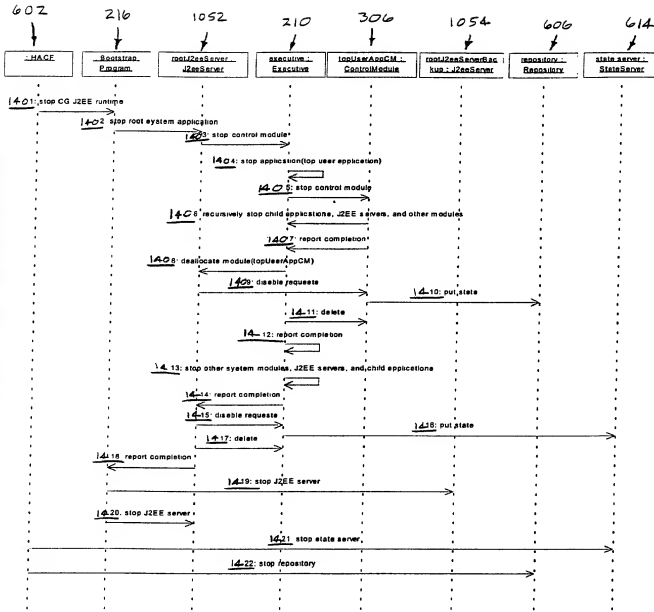
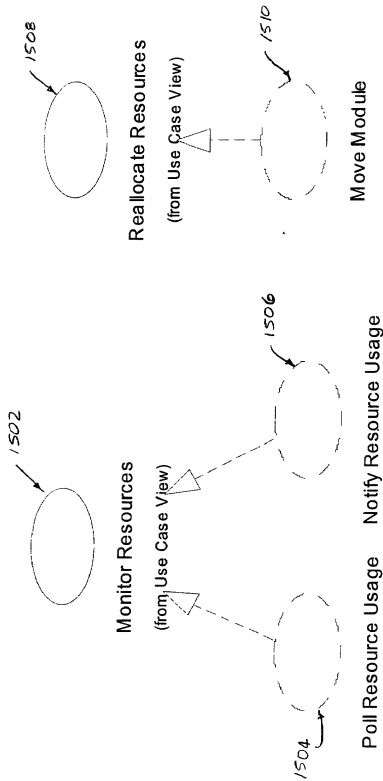
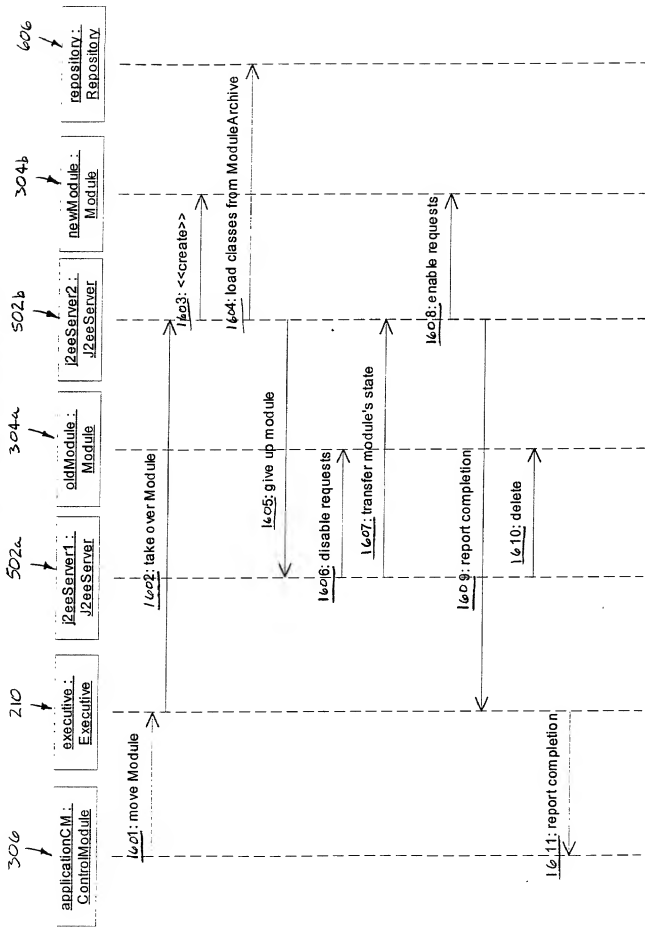


Fig. 14

1500



15



1700

parentAppCM : ControlModule

306

1750

parentAppCM : ControlModule

1752

parentAppCM : ControlModule

210

executive : Executive

502

J2eeServer : J2eeServer

606

repository : Repository

614

stateServer : StateServer

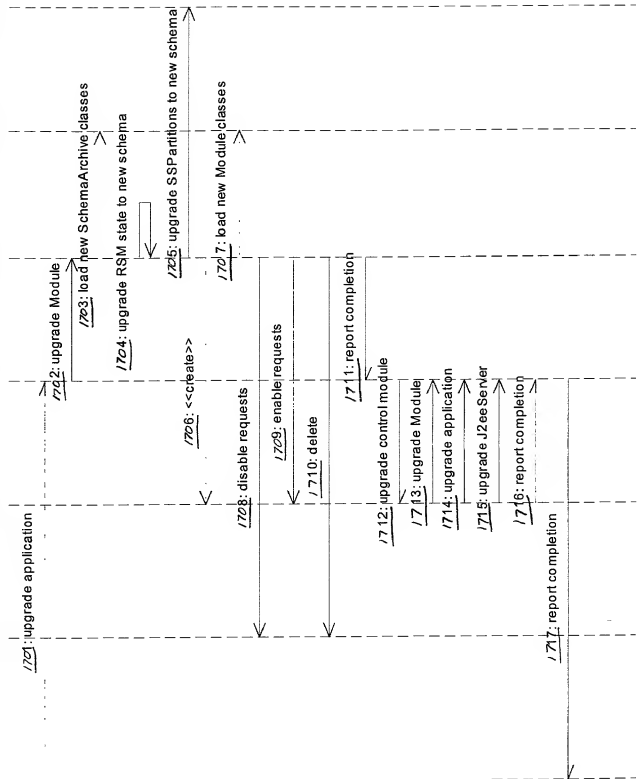


Fig. 17

306

304a

304b

210

502

606

614

applicationCM :
ControlModule

oldModule :
Module

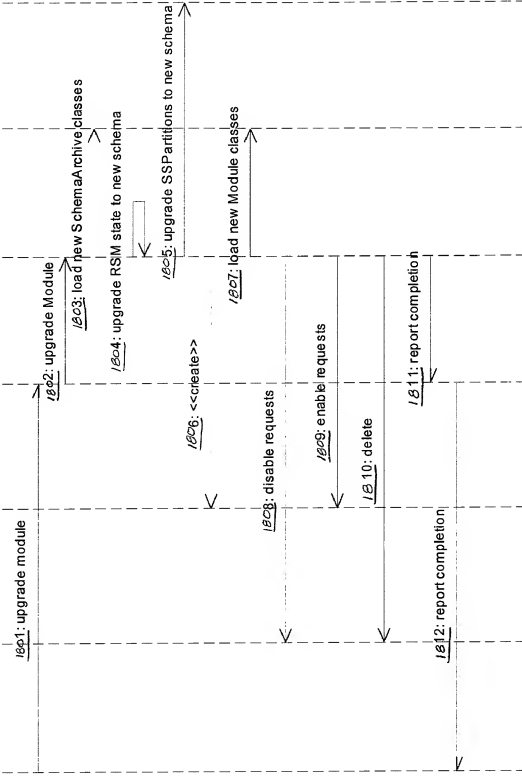
newModule :
Module

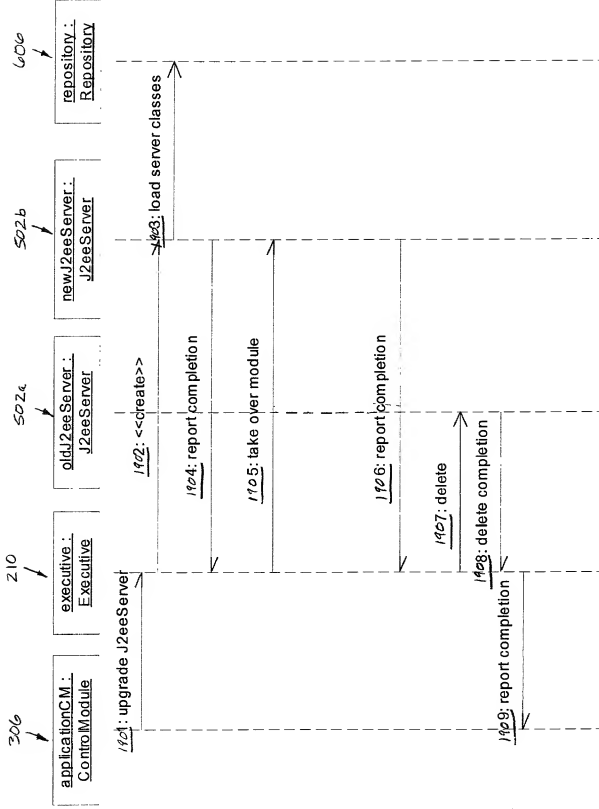
executive :
Executive

j2eeServer :
J2eeServer

repository :
Repository

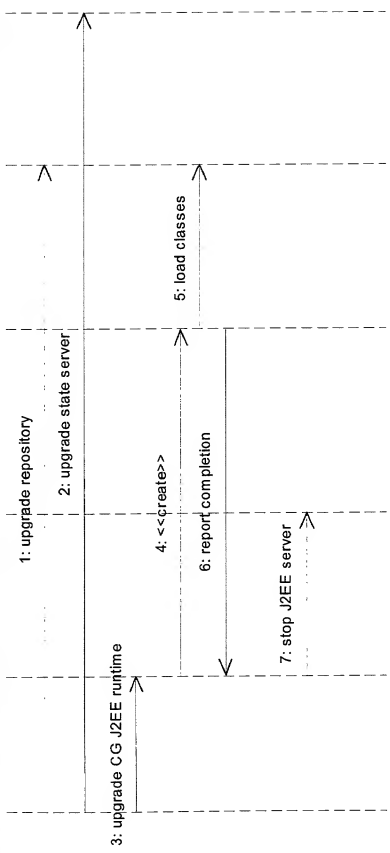
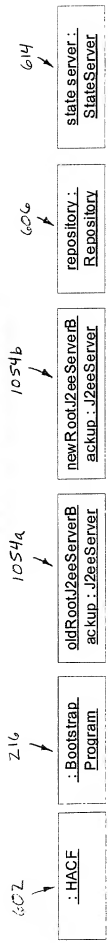
stateServer :
StateServer





PUTTING STRESS ON

2000



F15 20

2100

101140-510022000

2106

1052a

210a

1052b

210b

606

.Bootstrap
ProgramoldRootJ2eeServer
r1: J2eeServerexecutive1:
ExecutivenewRootJ2eeServer
r1: J2eeServerexecutive2:
Executiverepository:
Repository

2101: upgrade root J2EE server

2102: upgrade J2EE server

2103: <<create>>

2104: load server classes

2105: report completion

>

2106: take over module(executive)

>2107: <<create>>

>

2108: give up module state(executive)

>2109: disable requests

>

2110: transfer module state(executive)

2111: enable requests

>

2112: report completion

>

>

2113: take over module(topUserAppCM)

>

>

2114: report completion

>

>

2115: report completion

>

>

2116: report completion

>

>

2117: stop J2EE server

>

>

topUserAppCM is moved to
newRootJ2eeServer

>

>

2118: report completion

>

>

2119: report completion

>

>

2120: report completion

>

>

2121: report completion

>

>

2122: report completion

>

>

Figs 21

2200

Full Sequence

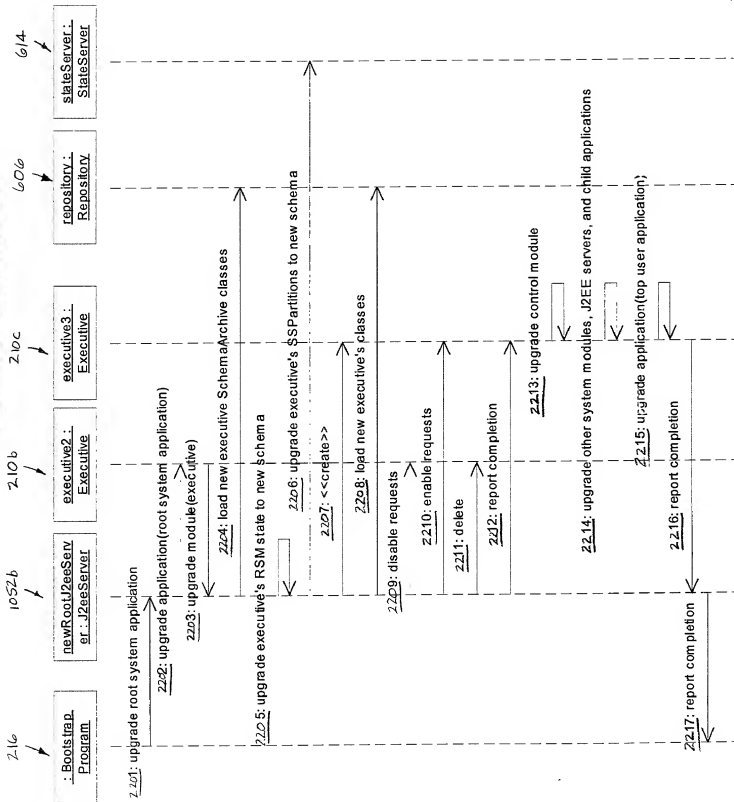


Fig. 22